

REMARKS – General

As per the following, applicants respectfully submit that patentable subject matter is clearly present. If the examiner agrees but does not feel that the present application is in condition for allowance *applicants respectfully request constructive assistance for proper inventors as per M.P.E.P 2173.02, and requests that the examiner write acceptable claims pursuant to MPEP 707.07(f).*

The Examiner's previous comments, and additional references provided post OA-2, have proven most helpful in understanding the deficiencies of previous submissions and understanding the clarification required. Thank you. The amended claims address these deficiencies as follows:

- 1) Correcting formal deficiencies previously identified by USPTO.
- 2) Clarifying antecedent references, particularly by using the same words as the specification. This was clearly a source of difficulty in the original submission, where the claims used a more general term than the specification, without clarifying references.
- 3) Detailing elements that were only referenced implicitly in the prior submission, particularly where subsequent discussions have indicated that further clarification was required.

4) Adding details to the claims to clarify the distinction from the prior art, and adding claims with further restrictions.

The claims have been re-partitioned and some new claims have been added so that there is not a 1:1 correspondence to the previous claims. Since the revisions were substantial, they are done via replacement claims. If this is inappropriate for any reason, please advise.

Regarding prior-art references provided by USPTO before and after OA-2:

This discussion references the claim numbers as in the submission before OA-2 (cancelled here), in order to trace to previous discussions, and traces them to the claims of the current amendment which have replaced them.

Sikes [US 5,894,455] presents a device which appears from the top-level drawing to be identical to the subject invention, but which is in fact quite different in function and structure. The ear-piece in Sikes is a passive receiver, activated by timing functions that remain with the setting device, whereas the ear-piece in the subject invention is an entirely autonomous timing device, using the base-station only for setting functions.

This distinction, and the consequent and unobvious benefits, are spelled out in detail in

the subject specification, and are briefly summarized in the following. This distinction was the essence of the original claim 1 ("...autonomous means to implement these settings when disconnected from the base station"). However, this description has been proven to lack sufficient clarity, exacerbated by inconsistent terminology and unclear antecedent basis (as cited by the Examiner). These issues have been addressed in the replacement claim 8, which also details the structural distinctions.

Groom [US 4,821,247] presents an autonomous ear-piece, but lacks the separate setting device of the subject invention. As detailed in the subject specification, this structural difference fails to produce the unobvious benefits of the claimed approach (it is hampered by necessarily tiny display and controls).

White [5,886,952] presents a remote control for an alarm clock, and thus establishes prior art for a timing device with a separate setting device. But in White, the portion that implements the settings (the alarm clock) is never connected to the setting device (the remote control). This contrasts with the previous claim 1 of the subject invention where the ear-piece implements setting "when disconnected from the base station", implying that it is initially connected. The new claim 8 makes this distinction explicit, further clarifies, and cites more detail of the enabling structure.

The structure of the subject invention provides a number of specific and unobvious benefits beyond the prior art, as detailed in the specification and as cited in claim 8B. These benefits include enabling a single base-station to support an unlimited number of ear-pieces, as per claim 14. A typical remote control, as per White, would require some other selection method to operate multiple alarms. The claimed method provides this capability implicitly. Structure allowing use of a single remote for multiple ear-pieces is neither anticipated nor implied by White, further indicating lack of obviousness.

Killion (6,453,051) further discloses use of a remote control to set an alarm clock function in a hearing-aid. It cites a commercial hearing aid product with a remote control, and suggests adaptability of the methodology to setting an alarm. But again, Killion does not anticipate an alarm that is connected to the setting device for programming, then removed for operation as per claim 8. Neither does Killion's solution provide the consequent and unobvious benefits as above.

The prior art references cited do not apply specifically to the previous claim 2 (new claims 16 and following) of the subject invention, which discuss the setting device (or base station) serving as the primary timing reference, so that ear-piece timing element drift does not accumulate over successive alarm settings. This two-part approach is clearly contrary to the intent of White (where the alarm clock has all but the setting functions). Killion is silent on the subject, discussing nothing other than setting an alarm time. The notion of automatically resetting the time reference when the alarm is enabled

is neither discussed nor implied. It is an enabling detail that becomes apparent only after investing the effort of reduction to practice, and is an enabler for acceptable accuracy using inexpensive components (such as the internal timing source in a commercial micro controller). The claims have been amended to clarify these distinctions.

The original claim 6 was intended to further restrict claim 2 to devices with an alarm setting. In the original submission this was incorrectly formatted as a lettered item under claim 2. Amendment A included a new mistake, incorrectly referencing claim 5 (rather than claim 2) as the antecedent. This clearly required correction, as done here.

I concur that claim 7 as initially submitted is, frankly, unclear. A complete replacement in several parts is submitted here.

Conclusion

Therefore, applicants respectfully submit that errors in the previous claims have been corrected and that the revised claims are allowable over prior art, and respectfully request reconsideration and allowance.

Conditional Request For Constructive Assistance

If, for any reason, this application is not believed to be in full condition for allowance, applicants respectfully request the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P 2173.02 and 707.07(j) regarding assistance for pre se inventors, in order that the undersigned can place this application in allowable condition as soon as possible and without need for further proceedings.

Very respectfully,


Joanna Williams


Darin Williams

11265 E. Chuckwagon Circle
Tucson Az, 85749

Tel (520) 760-1702 cell (520) 419-5164